

IN THE CLAIMS:

1. - 10. (Canceled)

11. (Currently Amended) A continuously variable electromagnetic transmission, including a commutator-less, axial flux dynamoelectric machine provided with an input shaft and an output shaft, and control means for controlling and supplying electric power at a variable frequency to said machine, said dynamoelectric machine including a first rotor connected to said input shaft, a second rotor, connected to said output shaft, and a stator assembly, said two rotors and said stator assembly comprising discoid elements, said discoid elements of said stator assembly and of at least one of said rotors comprising active elements having windings connected to said control means and arranged to interact with the other rotor by means of magnetic flux through air gaps including axial air gaps between respective discoid elements of said rotors and said stator assembly,

wherein said transmission includes displacement means for axially displacing at least one of said discoid elements to modify the width of the axial air gap between this discoid element and an adjacent discoid element.

12. (Previously Added) A transmission according to claim 11, wherein said discoid elements include at least one reactive element.

13. (Previously Added) A transmission according to claim 12, wherein said reactive element is a synchronous permanent magnet type element.

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14. (Previously Added) A transmission according to claim 12, wherein said reactive element is an asynchronous type element.

15. (Currently Amended) A transmission according to claim 11, wherein said first rotor and/or said second rotor includes at least two discoid elements between which a discoid element of the stator or of the other rotor is located.

16. (Currently Amended) A transmission according to claim 11, wherein said stator assembly includes at least two discoid elements between which a discoid element of one of said rotors is located.

17. (Previously Added) A transmission according to claim 11, wherein said displacement means include an axial screw mechanism driven in rotation by an electric motor.

18. (Previously Added) A transmission according to claim 11, wherein said displacement means include a cam mechanism driven by an electric motor.

19. (Previously Added) A transmission according to claim 11, including coupling means for mechanically connecting a discoid element of said first rotor to a discoid element of said second rotor in rotation.

20. (Previously Added) A transmission according to claim 19, wherein said coupling means include said displacement means, the connection between said two rotors being achieved via contact of said respective discoid elements of said first and second rotor.

21. (Currently Amended) A continuously variable electromagnetic transmission, including a commutator-less, axial flux dynamoelectric machine provided with an input shaft and an output shaft, and control means for controlling and supplying electric power at a variable frequency to said machine, said dynamoelectric machine including a first rotor connected to said input shaft, a second rotor, connected to said output shaft, and a stator assembly, said two rotors and said stator assembly comprising interacting elements, said interacting elements of said stator assembly and of at least one of said rotors comprising active elements having windings connected to said control means and arranged to interact with the other rotor by means of magnetic flux through air gaps including axial air gaps between respective interacting elements of said rotors and said stator assembly,

wherein said transmission includes displacement means for axially displacing at least one of said interacting elements to modify the width of the axial air gap between this interacting element and an adjacent interacting element.